

WORKING DRAFT

General

Name

Tychem® QC Pants

Item # 23



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

35350

Protection Type

Percutaneous

Equipment Category

Pants, elastic waist

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)
Domestic manufacturer

Manufacturer Type

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Not tested

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Protected Against

Many inorganic acids, bases, and other liquid chemicals such as pesticides. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel.

Duration of Protection

For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel. No test data available for CW agents.

Recommended Use(s)

Crisis management (post decontamination); medical triage; remediation

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Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	5 lb/container, 12 units/container
Package Size and Volume	14 7/8 in L x 10 in W x 10 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Sewn seam—overedge serged seam construction offers protection against many dry particulates and light sprays
Color	Yellow, grey

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	\$41/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection

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Testing Information

Physical properties:

Basis weight (ASTM D3776–85) 2.1 oz/yd²

Thickness (ASTM D1777–64) 6.0 mils

Mullen burst (ASTM D3786–87) 66 psi

Breaking strength—Grab (md/xd) (ASTM D1682–64, sec. 5.3) 25/35 lb

Tearing strength—Trapezoid (md/xd) (ASTM D1117–80) 7/5 lb

Permeation data available by calling 877–797–5907 or go to
www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface

Not applicable

Capability

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name

Tychem® QC Hood

Item # 24



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

35386

Protection Type

Percutaneous

Equipment Category

Hood, pull over, shoulder length, and elastic face

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)
Domestic manufacturer

Manufacturer Type

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Not tested

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Protected Against

Many inorganic acids, bases, and other liquid chemicals such as pesticides. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel.

Duration of Protection

For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel. No test data available for CW agents.

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Recommended Use(s)

Crisis management (post decontamination); medical triage; and remediation

Physical Parameters

Sizes Available

S through XXXXL. Additional sizes available upon request.

Weight

3 lb/container, 48 units/container

Package Size and Volume

14 7/8 in L x 10 in W x 10 in H

Power Requirements

Not applicable

Material Type

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Construction Type

Sewn seam—overedge serged seam construction offers protection against many dry particulates and light sprays

Color

Yellow, grey

Logistical Parameters

Ease of Use

Ergonomically designed for maximum mobility and flexibility

Consumables

None

Maintenance Requirements

Visual inspection prior to use

Shelf Life

Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.

Transportability

Easily transported

Operational Limitations

Directly relates to the physical condition of user

Environmental Conditions

Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.

Unit Cost

\$47/carton

Maintenance Cost

Minimum labor cost for routine suit inspection

Warranty

90 d for workmanship and materials

Don/Doff Information

No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse

Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.

Launderability

Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.

Accessories

None

Special Requirements

Training Requirements

No special training required

Training Available

Yes. DuPont will provide specialized group training upon request.

Manuals Available

Permeation Guide available

Surveillance Testing Requirements

Visual inspection (for holes and tears) prior to use

Support Equipment

Appropriate respiratory, foot, hand, and head protection

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Testing Information

Physical properties:

Basis weight (ASTM D3776–85) 2.1 oz/yd²

Thickness (ASTM D1777–64) 6.0 mils

Mullen burst (ASTM D3786–87) 66 psi

Breaking strength—Grab (md/xd) (ASTM D1682–64, sec. 5.3) 25/35 lb

Tearing strength—Trapezoid (md/xd) (ASTM D1117–80) 7/5 lb

Permeation data available by calling 877–797–5907 or go to
www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface

Not applicable

Capability

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name

Tychem® QC Hood

Item # 25



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

37386

Protection Type

Percutaneous

Equipment Category

Hood, pull over, shoulder length, and elastic face

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)

Manufacturer Type

Domestic manufacturer

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Not tested

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Protected Against

Many inorganic acids, bases, and other liquid chemicals such as pesticides. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel.

Duration of Protection

For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 616, or go to www.dupont.com/tyvek/protective-apparel. No test data available for CW agents.

Recommended Use(s)

Crisis management (post decontamination); medical triage; and remediation

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Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/container, 48 units/container
Package Size and Volume	14 7/8 in L x 10 in W x 10 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Bound seam—tightly sewn seam is reinforced with an outer binding to further enhance seam strength and barrier quality
Color	Yellow, grey

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	\$54/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Laundryability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, hand, and head protection

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Testing Information

Physical properties:

Basis weight (ASTM D3776–85) 2.1 oz/yd²

Thickness (ASTM D1777–64) 6.0 mils

Mullen burst (ASTM D3786–87) 66 psi

Breaking strength—Grab (md/xd) (ASTM D1682–64, sec. 5.3) 25/35 lb

Tearing strength—Trapezoid (md/xd) (ASTM D1117–80) 7/5 lb

Permeation data available by calling 877–797–5907 or go to
www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface

Not applicable

Capability

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name

Tychem® SL Hood

Item # 26



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

42386

Protection Type

Percutaneous

Equipment Category

Hood, hood, elastic face, pull over, and shoulder length

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)

Manufacturer Type

Domestic manufacturer

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

**Chemical Warfare (CW)
Agents Protected Against**

Nerve agents (GB and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

**Biological Warfare (BW)
Agents Protected Against
Toxic Industrial (TIMs)
Protected Against**

Not specified

Duration of Protection

A broad range of liquid chemicals. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 621, or go to www.dupont.com/tyvek/protective-apparel.

Fabric test data: Average breakthrough time

VX: Greater than 12 h at 10 g/m²

GB, and L: Greater than 6 h at 10 g/m²

D: Greater than 3 h at 10 g/m²

For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329.

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Recommended Use(s)

Crisis management; remediation; and decontamination

Physical Parameters

Sizes Available

S through XXXXL. Additional sizes available upon request.

Weight

5 lb/container, 48 unit/container

Package Size and Volume

14 7/8 in L x 10 in W x 10 in H

Power Requirements

Not applicable

Material Type

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Construction Type

Bound seam—tightly sew seam is reinforced with an outer binding to further enhance seam strength and barrier quality

Color

White

Logistical Parameters

Ease of Use

Ergonomically designed for maximum mobility and flexibility

Consumables

None

Maintenance Requirements

Visual inspection prior to use

Shelf Life

Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.

Transportability

Easily transported

Operational Limitations

Directly relates to the physical condition of user

Environmental Conditions

Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.

Unit Cost

\$89/carton

Maintenance Cost

Minimum labor cost for routine suit inspection

Warranty

90 d for workmanship and materials

Don/Doff Information

No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse

Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.

Laundryability

Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.

Accessories

None

Special Requirements

Training Requirements

No special training required

Training Available

Yes. DuPont will provide specialized group training upon request.

Manuals Available

Permeation Guide available

Surveillance Testing Requirements

Visual inspection (for holes and tears) prior to use

Support Equipment

Appropriate respiratory, foot, hand, and head protection

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Testing Information

Physical properties:

Basis weight (ASTM D3776–85) 3.1 oz/ yd²

Thickness (ASTM D1777–64) 10.3 mils

Mullen burst (ASTM D3786–87) 78 psi

Breaking strength—Grab (md/xd) (ASTM D1682–64, sec. 5.3) 42/45 lb

Tearing strength—Trapezoid (md/xd) (ASTM D1117–80) 11/9 lb

Permeation data available by calling 877–797–5907 or go to
www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface

Not applicable

Capability

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name

Tychem® BR Hood/Vest

Item # 27



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

95389

Protection Type

Percutaneous

Equipment Category

Hood/vest, pullover, PVC face shield, and velcro waist belt

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)

Manufacturer Type

Domestic manufacturer

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

**Chemical Warfare (CW)
Agents Protected Against**

Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

**Biological Warfare (BW)
Agents Protected Against
Toxic Industrial (TIMs)
Protected Against**

Not specified

A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel.

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Duration of Protection

Fabric test data: Average breakthrough time
GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m²
GB, HD, and VX: Greater than 12 h at 100 g/m² (total coverage)
L: Greater than 2 h at 100 g/m² (total coverage)
For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel.

Recommended Use(s)

Emergency response; crisis management; remediation, secondary decontamination in hospital or emergency area, and warm zone decontamination

Physical Parameters

Sizes Available

S through XXXXL. Additional sizes available upon request.

Weight

3 lb/container, 2 units/container

Package Size and Volume

16 in L x 10 1/4 in W x 14 1/8 in H

Power Requirements

Not applicable

Material Type

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Construction Type

Thermo Bond Seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress

Color

Yellow or olive drab

Logistical Parameters

Ease of Use

Ergonomically designed for maximum mobility and flexibility

Consumables

None

Maintenance Requirements

Visual inspection prior to use

Shelf Life

Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.

Transportability

Easily transported

Operational Limitations

Directly relates to the physical condition of user

Environmental Conditions

Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.

Unit Cost

\$75/carton

Maintenance Cost

Minimum labor cost for routine suit inspection

Warranty

90 d for workmanship and materials

Don/Doff Information

No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse

Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.

Launderability

Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.

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Accessories

None

Special Requirements

Training Requirements

No special training required

Training Available

Yes. DuPont will provide specialized group training upon request.

Manuals Available

Permeation Guide available

Surveillance Testing Requirements

Visual inspection (for holes and tears) prior to use

Support Equipment

Appropriate respiratory, foot, hand, and head protection

Testing Information

Physical properties:

Basis weight (ASTM D3776–85) 6.6 oz/yd²

Thickness (ASTM D1777–64) 16 mils

Ball burst (ASTM D3787–89) 90 psi

Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lb

Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lb

Permeation data available by calling 877–797–5907 or go to www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface Capability

Not applicable

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name

Tychem® TK Hood/Vest

Item # 28



Technology

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number

TK389

Protection Type

Percutaneous

Equipment Category

Hood/vest, pullover, PVC face shield, and velcro waist belt

Availability

Commercial

Current User(s)

U.S. Government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer

DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800-845-6962 (Tel)
843-335-8599 (Fax)
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888-577-6960 (Tel)
Domestic manufacturer

Manufacturer Type

Developer

DuPont Protective Apparel

Source

DuPont Tyvek® Protective Apparel

Certification

Not applicable

Operational Parameters

**Chemical Warfare (CW)
Agents Protected Against**

Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

**Biological Warfare (BW)
Agents Protected Against
Toxic Industrial (TIMs)
Protected Against**

Not specified

Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand service at 800-558-9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel.

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Duration of Protection

Fabric test data: Average breakthrough time
GB, HD, VX, and L: Greater than 12 h at 100 g/m² (total coverage)
GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m²
For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel

Recommended Use(s)

Emergency response; crisis management; remediation, secondary decontamination in hospital or emergency area, and warm zone decontamination

Physical Parameters

Sizes Available

S through XXXXL. Additional sizes available upon request.

Weight

3 lb/container, 2 units/container

Package Size and Volume

16 in L x 10 1/4 in W x 14 1/8 in H

Power Requirements

Not applicable

Material Type

Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Construction Type

Thermo bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.

Color

High-visibility lime yellow

Logistical Parameters

Ease of Use

Ergonomically designed for maximum mobility and flexibility

Consumables

None

Maintenance Requirements

Visual inspection prior to use

Shelf Life

Store in a cool, dry environment in original packaging. Manufacturer recommends designating "for training use only" after 5 yr of storage.

Transportability

Easily transported

Operational Limitations

Directly relates to the physical condition of user

Environmental Conditions

Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.

Unit Cost

\$83/carton

Maintenance Cost

Minimum labor cost for routine suit inspection

Warranty

90 d for workmanship and materials

Don/Doff Information

No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse

Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.

Launderability

Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.

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Accessories

None

Special Requirements

Training Requirements

No special training required

Training Available

Yes. DuPont will provide specialized group training upon request.

Manuals Available

Permeation Guide available

Surveillance Testing Requirements

Visual inspection (for holes and tears) prior to use

Support Equipment

Appropriate respiratory, foot, hand, and head protection

Testing Information

Physical properties:

Basis weight (ASTM D3776) 10.6 oz/yd²

Thickness (ASTM D1777) 26 mils

Ball burst (ASTM D3787) 187 psi

Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lb

Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lb

Permeation data available by calling 877-797-5907 or go to www.dupont.com/tyvek/protective-apparel

Applicable Regulations

None

Health Hazards

None

Communications Interface Capability

Not applicable

EOD Compatibility

Compatible with EOD suit

WORKING DRAFT

General

Name *Integrated Chemical Biological Protective Glove*

Item # 29

Picture Not Available

Technology

Permeable oil/water repellant outer fabric with leather palm and integrated CB interior filter material with bonded face. Standard model not fire resistant (FR); FR model available (different outer material).

Stock Number

ICBPG-S: Standard. Glove; ICBPG-F: FR Glove

Protection Type

Skin protection from Military Chemical/Biological warfare agents

Equipment Category

Five finger protective glove with gauntlet, offering high dexterity and comfort

Availability

Standard Med—60 d after order
FR Model—90 d to 120 d after order

Current User(s)

Field tested for NATO Military use

Manufacturer

Wells Lamont

Manufacturer Type

Private, Foreign/USA

Developer

Gants Rigaudy

Source

Sales: INDEF Services Intl
14847 Lee Highway
Amissville, VA 20106-0089
540-937-7327 (Tel)
540-937-7328 (Fax)
indefsteve@msn.com
Meets NATO Military Standard

Certification

Operational Parameters

Chemical Warfare (CW)

All Military CW agents

Agents Protected Against

Biological Warfare (BW)

All Military BW agents

Agents Protected Against

Toxic Industrial (TIMs)

Not applicable

Protected Against

Duration of Protection

Minimum 8 h against NATO standard challenge

Recommended Use(s)

Tactical operations, CBW response teams: Used with CB Protective Ensemble by ground personnel, air crews, and vehicle operators. Particularly designed where high dexterity and comfort are required.

Physical Parameters

Sizes Available

S, M, L, and XL

Weight

14 oz

Package Size and Volume

16 in x 6 in x 1.5 in—0.1 cuff

Power Requirements

None

Material Type

Permeable oil/water repellant outer fabric with leather palm and integrated CB interior filter material with bonded face. Standard model not FR; FR model available (different outer material).

WORKING DRAFT

Construction Type

Sewn

Color

Forest green or tan

Logistical Parameters

Ease of Use

Simple pull on—no training required. Gloves provide maximum comfort (even in hot/humid) and optimum dexterity (ease of picking up objects and handling).

Consumables

None

Maintenance Requirements

None

Shelf Life

Estimated 6 yr to 8 yr

Transportability

Not applicable

Operational Limitations

Not for use with industrial HazMat

Environmental Conditions

-30 °F to +140 °F. Maintains protection if wet.

Unit Cost

\$70/pair

Maintenance Cost

None

Warranty

Replacement if manufacturing flaw found upon initial use within 12 mo of purchase.

Don/Doff Information

Glove is worn over skin with gauntlet over arm of ensemble. Can be don without assistance.

Use/Reuse

Use minimum 14 d in normal wear

Launderability

Hand wash only up to 3 times (inspect for tears/wear after each)

Accessories

None

Special Requirements

Training Requirements

None

Training Available

None required

Manuals Available

None required

Surveillance Testing Requirements

Recommend periodic test of sample from each lot after 24 mo to 36 mo

Support Equipment

None

Testing Information

Meets NATO Standard Test Requirement for CB ensemble

Applicable Regulations

Not applicable

Health Hazards

None

Communications Interface Capability

Not applicable

EOD Compatibility

Yes

WORKING DRAFT

General

Name	<i>NBC Gloves</i>
Item #	30
Technology	Picture Not Available
Stock Number	Rolamit-NBC Barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Protection Type	Sweden Civil Defense nsn 12881
Equipment Category	Not specified
Availability	Gloves
Current User(s)	In production since 1987
Manufacturer	Swedish Civil Defense
Manufacturer Type	Goetzloff GmbH
Developer	Schirmerstrasse 28, A-4060
Source	Leonding-Linz, Austria
Certification	POC: Mr. Lewis B. Sykes (U.S. Liaison) 703-504-0260 (Tel) e-mail: LBS1328@aol.com
	Foreign
	Goetzloff GmbH
	Goetzloff GmbH
	Ministry of Defense, Austria

Operational Parameters

Chemical Warfare (CW)	Classical nerve and blister agents; test documents can be supplied on request
Agents Protected Against	
Biological Warfare (BW)	Classical BW agents; test documents can be supplied on request
Agents Protected Against	
Toxic Industrial (TIMs)	TIMs tested according ASTM F 1001
Protected Against	
Duration of Protection	Depends on the situation; e.g., in excess of 24 h against Mustard in worst-case scenarios
Recommended Use(s)	Tactical and crisis management

Physical Parameters

Sizes Available	S, M, L, and XL
Weight	1 oz per pair
Package Size and Volume	16.2 in
Power Requirements	None
Material Type	Rolamit-NBC barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Construction Type	Yes; heat sealed
Color	Standard color is military green, other colors on request

WORKING DRAFT

Logistical Parameters

Ease of Use	User has complete freedom of movement; glove has three fingers
Consumables	None
Maintenance Requirements	None
Shelf Life	Indefinite when stored in original wrapper
Transportability	Not applicable
Operational Limitations	Not specified
Environmental Conditions	Designed to be worn under common environmental conditions found in the field
Unit Cost	\$1.50 per pair
Maintenance Cost	None
Warranty	20 yr in unconditioned storage
Don/Doff Information	No assistance required for donning or doffing
Use/Reuse	Reusable
Launderability	Can be laundered multiple times with standard detergents and maintain their effectiveness; standard decon procedures can be used
Accessories	None

Special Requirements

Training Requirements	None
Training Available	None required
Manuals Available	None required
Surveillance Testing Requirements	Visual inspection before and after each use
Support Equipment	None
Testing Information	Test data can be obtained on request
Applicable Regulations	Our products are tested by TNO, which certifies NATO standard for our products
Health Hazards	None; incineration results in no toxic residues
Communications Interface Capability	Not specified
EOD Compatibility	Not specified

WORKING DRAFT

General

Name	<i>Eurolite NBC-Casualty Bag</i>
Item # 31	Picture Not Available
Technology	Rolamit-NBC Barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Stock Number	ZABCCASBAG
Protection Type	Not specified
Equipment Category	Casualty bag
Availability	In production since 1995
Current User(s)	Austrian Army
Manufacturer	Goetzloff GmbH Schirmerstrasse 28, A-4060 Leonding-Linz, Austria POC: Mr. Lewis B. Sykes (U.S. Liaison) 703-504-0260 (Tel) e-mail: LBS1328@aol.com
Manufacturer Type	Foreign
Developer	Goetzloff GmbH
Source	Goetzloff GmbH
Certification	Ministry of Defense, Austria

Operational Parameters

Chemical Warfare (CW)	Classical nerve and blister agents; test documents can be supplied on request
Agents Protected Against	
Biological Warfare (BW)	Classical BW agents; test documents can be supplied on request
Agents Protected Against	
Toxic Industrial (TIMs)	TIMs tested according ASTM F 1001
Protected Against	
Duration of Protection	Depends on the situation; e.g., in excess of 24 h against Mustard in worst-case scenarios
Recommended Use(s)	Tactical and crisis management

Physical Parameters

Sizes Available	S, M, L, and XL
Weight	23 oz
Package Size and Volume	30 in x 25 in x 4 in
Power Requirements	None
Material Type	Rolamit-NBC barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Construction Type	Yes; heat sealed
Color	Standard color is military green, other colors on request

WORKING DRAFT

Logistical Parameters

Ease of Use	User has complete freedom of movement; glove has three fingers
Consumables	None
Maintenance Requirements	None
Shelf Life	Indefinite when stored in original wrapper
Transportability	Not applicable
Operational Limitations	Not specified
Environmental Conditions	Designed to be worn under common environmental conditions found in the field
Unit Cost	\$70
Maintenance Cost	None
Warranty	20 yr in unconditioned storage
Don/Doff Information	No assistance required for donning or doffing
Use/Reuse	Reusable
Launderability	Can be laundered multiple times with standard detergents and maintain their effectiveness; standard decon procedures can be used
Accessories	Blowing unit

Special Requirements

Training Requirements	None
Training Available	None required
Manuals Available	None required
Surveillance Testing Requirements	Visual inspection before and after each use
Support Equipment	None
Testing Information	Test data can be obtained on request
Applicable Regulations	Our products are tested by TNO, which certifies NATO standard for our products
Health Hazards	None; incineration results in no toxic residues
Communications Interface Capability	Not specified
EOD Compatibility	Not specified

WORKING DRAFT

General

Name	<i>Eurolite NBC-Cover Poncho</i>
Item # 32	Picture Not Available
Technology	Rolamit-NBC Barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Stock Number	ZABCCCPBSF
Protection Type	Not specified
Equipment Category	Poncho
Availability	In production since 1987
Current User(s)	Austrian Army, Swedish Civil Defense
Manufacturer	Goetzloff GmbH Schirmerstrasse 28, A-4060 Leonding-Linz, Austria POC: Mr. Lewis B. Sykes (U.S. Liaison) 703-504-0260 (Tel) e-mail: LBS1328@aol.com
Manufacturer Type	Foreign
Developer	Goetzloff GmbH
Source	Goetzloff GmbH
Certification	Ministry of Defense, Austria

Operational Parameters

Chemical Warfare (CW)	Classical nerve and blister agents; test documents can be supplied on request
Agents Protected Against	
Biological Warfare (BW)	Classical BW agents; test documents can be supplied on request
Agents Protected Against	
Toxic Industrial (TIMs)	TIMs tested according ASTM F 1001
Protected Against	
Duration of Protection	Depends on the situation; e.g., in excess of 24 h against Mustard in worst-case scenarios
Recommended Use(s)	Tactical and crisis management

Physical Parameters

Sizes Available	S, M, L, and XL
Weight	8.8 oz
Package Size and Volume	13 in x 11 in x 4 in
Power Requirements	None
Material Type	Rolamit-NBC barrierfilm—A 7-layer polyolefin film laminated in staggered angles with 3 layers on either side with a middle barrier of EVOH; impermeable; self-extinguishing
Construction Type	Yes; heat sealed
Color	Standard color is military green, other colors on request

WORKING DRAFT

Logistical Parameters

Ease of Use	User has complete freedom of movement; glove has three fingers
Consumables	None
Maintenance Requirements	None
Shelf Life	Indefinite when stored in original wrapper
Transportability	Not applicable
Operational Limitations	Not specified
Environmental Conditions	Designed to be worn under common environmental conditions found in the field
Unit Cost	\$6
Maintenance Cost	None
Warranty	20 yr in unconditioned storage
Don/Doff Information	No assistance required for donning or doffing
Use/Reuse	Reusable
Launderability	Can be laundered multiple times with standard detergents and maintain their effectiveness; standard decon procedures can be used
Accessories	None

Special Requirements

Training Requirements	None
Training Available	None required
Manuals Available	None required
Surveillance Testing Requirements	Visual inspection before and after each use
Support Equipment	None
Testing Information	Test data can be obtained on request
Applicable Regulations	Our products are tested by TNO, which certifies NATO standard for our products
Health Hazards	None; incineration results in no toxic residues
Communications Interface Capability	Not specified
EOD Compatibility	Not specified

WORKING DRAFT

General

Name

Chemical Protective Butyl Rubber Gloves

Item # 33



Technology

Guardian gloves are "solution-dipped," providing unparalleled protection for their users. Tight molecular structures are the key to chemical impermeability. Our state-of-the-art microprocessors provide accurate controls every step of the way, from mixing our proprietary compounds, to dipping, curing and drying, in order to attain the necessary strength.

Stock Number

(CP-14F, CP-14FR, and CP-7F)

Protection Type

Percutaneous

Equipment Category

Gloves, CP-14, Surgical Fit Gloves

Availability

Commercial

Current User(s)

U.S. Government (DLA)

Manufacturer

Guardian Manufacturing Co.
302 Conwell Ave.
Willard, OH 44890-9529
POC: Gene Lamoreaux
419-933-2711 (Tel)
419-935-8961 (Fax)
800-243-7379 (Tel)
E-mail: susanl@willard-oh.com
<http://www.guardian-mfg.com>

Manufacturer Type

Domestic

Developer

Guardian

Source

Internet: www.guardian-mfg.com/guardianmfg.html

Certification

ISO-9001 Registered, Defense Supply Center, Philadelphia, PA

Operational Parameters

Chemical Warfare (CW)

All

Agents Protected Against

Biological Warfare (BW)

All

Agents Protected Against

Toxic Industrial (TIMs)

Same chemical protection properties as standard line of Butyl Gloves.
Acids, alkalis, MEK, MIBK, acetone, others

Protected Against

Duration of Protection

Mustard resistance 240 min. GB resistance 450 min.

Recommended Use(s)

Industrial, laboratory, first response, and chemical production

WORKING DRAFT

Physical Parameters

Sizes Available	XS to XL (5 sizes)
Weight	3.5 lb per dozen pairs
Package Size and Volume	16 in x 6.5 in x 4 in
Power Requirements	Not applicable
Material Type	Butyl—Impermeable
Construction Type	Seamless—Manufactured on a surgical form in 7 mil and 14 mil thickness. Finish is either smooth or rough. The medium weight style, CP-14FR, is available with a pumice overdip for greater grip capability. The additional pumice dip provides a glove which meets or exceeds the permeation capabilities of the smooth style.
Color	Black

Logistical Parameters

Ease of Use	Designed for comfort, security, and dexterity
Consumables	Not applicable
Maintenance Requirements	Not applicable
Shelf Life	5 yr
Transportability	Not applicable
Operational Limitations	Not applicable
Environmental Conditions	Not applicable
Unit Cost	\$9.39 per pair
Maintenance Cost	Not applicable
Warranty	5 yr
Don/DoFF Information	Not applicable
Use/Reuse	Gloves can be decontaminated with Super Tropical Bleach (STB)
Launderability	Unknown
Accessories	Not applicable

Special Requirements

Training Requirements	Minimal
Training Available	Not applicable
Manuals Available	Not applicable
Surveillance Testing Requirements	Not applicable
Support Equipment	Not applicable
Testing Information	Meets requirements of MIL-G-43976
Applicable Regulations	MIL-G-43976
Health Hazards	None
Communications Interface Capability	Meets requirements of MIL-G-43976
EOD Compatibility	Compatible with current suits

WORKING DRAFT

General

Name

Chemical Protective Butyl Rubber Gloves

Item # 34



Technology

Guardian gloves are "solution-dipped," providing unparalleled protection for their users. Tight molecular structures are the key to chemical impermeability. Our state-of-the-art microprocessors provide accurate controls every step of the way, from mixing our proprietary compounds, to dipping, curing and drying, in order to attain the necessary strength.

Stock Number

CP-25

Protection Type

Percutaneous

Equipment Category

Gloves

Availability

Commercial

Current User(s)

U.S. Government (DLA)

Manufacturer

Guardian Manufacturing Co.
302 Conwell Ave.
Willard, OH 44890-9529
POC: Gene Lamoreaux
419-933-2711 (Tel)
419-935-8961 (Fax)
800-243-7379 (Tel)
E-mail: susanl@willard-oh.com
<http://www.guardian-mfg.com>
Domestic

Manufacturer Type

Developer

Guardian

Source

Internet: www.guardian-mfg.com/guardianmfg.html

Certification

ISO-9001 Registered
ASTM F739-85 by TRI/Environmental, Inc.
Manufactured according to Mil-G-43976, Mil-G-12223, and
ZZ-G-381, Defense Supply Center, Philadelphia, PA

Operational Parameters

Chemical Warfare (CW)

All

Agents Protected Against

Biological Warfare (BW)

All

Agents Protected Against

Toxic Industrial (TIMs)

Same chemical protection properties as standard line of Butyl Gloves.
Acids, alkalis, MEK, MIBK, acetone, and others.

Protected Against

Duration of Protection

Mustard resistance 360 min. GB resistance 450 min.

Recommended Use(s)

Industrial, laboratory, first response, and chemical production

WORKING DRAFT

Physical Parameters

Sizes Available	XS to SL (5 sizes)
Weight	5 lb per dozen pairs
Package Size and Volume	16 in x 6.5 in x 6 in
Power Requirements	Not applicable
Material Type	Butyl—impermeable. Available in four thicknesses.
Construction Type	Seamless—The rough-grip finish, gives increased dexterity and improved grip. It is now available on Guardian lightweight butyl. Guardian also offers the rough-grip finish on its medium and heavyweight Butyl gloves.
Color	Black

Logistical Parameters

Ease of Use	Not specified
Consumables	Not applicable
Maintenance Requirements	Not applicable
Shelf Life	5 yr
Transportability	Not applicable
Operational Limitations	Not applicable
Environmental Conditions	Not applicable
Unit Cost	\$16.71 per pair
Maintenance Cost	Not applicable
Warranty	5 yr
Don/Doff Information	Not applicable
Use/Reuse	Gloves can be decontaminated with STB
Laundryability	Unknown
Accessories	Not applicable

Special Requirements

Training Requirements	Minimal
Training Available	Not applicable
Manuals Available	Not applicable
Surveillance Testing Requirements	Not applicable
Support Equipment	Not applicable
Testing Information	Meets requirements of MIL-G-43976
Applicable Regulations	MIL-G-43976
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with current suits

WORKING DRAFT

General

Name

Item # 35

Neoprene Gloves



Technology

Guardian gloves are "solution-dipped," providing unparalleled protection for their users. Tight molecular structures are the key to chemical impermeability. Our state-of-the-art microprocessors provide accurate controls every step of the way, from mixing our proprietary compounds, to dipping, curing and drying, in order to attain the necessary strength.

Stock Number

Not specified

Protection Type

Percutaneous

Equipment Category

Gloves (vapor protection when properly worn as part of the glove system with the complete vapor protective garment ensemble)

Availability

Commercial

Current User(s)

Not specified

Manufacturer

Guardian Manufacturing Co.
302 Conwell Ave.
Willard, OH 44890-9529
POC: Gene Lamoreaux
419-933-2711 (Tel)
419-935-8961 (Fax)
800-243-7379 (Tel)
E-mail: susanl@willard-oh.com
<http://www.guardian-mfg.com>
Domestic

Manufacturer Type

Developer

Guardian

Source

Internet: www.guardian-mfg.com/guardianmfg.html

Certification

ISO-9001 Registered.
Manufactured according to ZZ-G-381.
NFPA 1992—Splash protection.
NFPA 1991—Vapor protection garment specification.

Operational Parameters

Chemical Warfare (CW)

Yes

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Yes

Protected Against

Duration of Protection

Not specified

WORKING DRAFT

Recommended Use(s)

Provide chemical protection and resist deterioration from contact with petroleum products

Physical Parameters

Sizes Available

9, 10, 11, and 12

Weight

Not specified

Package Size and Volume

Not specified

Power Requirements

None

Material Type

Neoprene. Guardian meets the needs of tomorrow, today with a sophisticated Research and Development facility complete with research laboratory and a mini-factory where new compounds and processes are tested daily. Guardian gloves will exceed your expectations in comfort, utility, and design.

Construction Type

Smooth finish

Color

Black

Logistical Parameters

Ease of Use

Not specified

Consumables

Not applicable

Maintenance Requirements

None

Shelf Life

Not specified

Transportability

Not applicable

Operational Limitations

Not applicable

Environmental Conditions

Not specified

Unit Cost

Not specified

Maintenance Cost

None

Warranty

Not specified

Don/Dooff Information

No assistance necessary

Use/Reuse

Reusable

Laundryability

Not specified

Accessories

None

Special Requirements

Training Requirements

None

Training Available

Not applicable

Manuals Available

Not applicable

Surveillance Testing

Not applicable

Requirements

Support Equipment

Not applicable

Testing Information

Not specified

Applicable Regulations

Not specified

Health Hazards

None

Communications Interface

Meets requirements of MIL-G-43976

Capability

EOD Compatibility

Not specified

WORKING DRAFT

General

Name	<i>NBC Casualty Bag</i>
Item # 36	Picture Not Available
Technology	Charcoal impregnated inner. Liquid chemical resistant outer fabric. Vinyl coated lower section.
Stock Number	ID-111-100
Protection Type	Percutaneous
Equipment Category	Casualty bag
Availability	In production
Current User(s)	Earlier version used by Canadian Department of National Defense
Manufacturer	Irvin Aerospace Canada Ltd. P.O. Box 280 479 Central Avenue Fort Erie, Ontario L2A 5M9 POC: Doug Eaton 905-871-6510 (Tel) 905-871-6534 (Fax)
Manufacturer Type	Foreign
Developer	Irvin Aerospace Canada Ltd., with support of Canadian Department of National Defense
Source	Irvin Aerospace Canada Ltd., with support of Canadian Department of National Defense
Certification	Canadian Department of National Defense

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	All known military chemical agents
Biological Warfare (BW) Agents Protected Against	None
Toxic Industrial (TIMs) Protected Against	Under study
Duration of Protection	24 h (in most cases)
Recommended Use(s)	Not specified

Physical Parameters

Sizes Available	Not applicable
Weight	26 lb
Package Size and Volume	24 in x 24 in x 8 in
Power Requirements	12 V dc battery pack (provided as option)
Material Type	Charcoal impregnated inner. Liquid chemical resistant outer fabric. Vinyl coated lower section.
Construction Type	Sewn and sealed as required
Color	Per customer requirements

WORKING DRAFT

Logistical Parameters

Ease of Use	Fast closing and opening
Consumables	Canisters
Maintenance Requirements	Routine preventative maintenance
Shelf Life	10 yr minimum
Transportability	Fully transportable
Operational Limitations	Full military qualification
Environmental Conditions	All common military environmental conditions
Unit Cost	Approximately \$1.85K without blower assembly, depending upon configuration. Volume dependant.
Maintenance Cost	Not applicable
Warranty	1 yr
Don/Doff Information	Casualty requires assistance to enter and exit
Use/Reuse	Reusable
Launderability	Laundering: clean in soapy water. Decontamination: operator dependent
Accessories	Blower, canisters, and battery pack

Special Requirements

Training Requirements	1 h
Training Available	Yes. Operator and trainer courses available.
Manuals Available	User, maintenance, and repair
Surveillance Testing Requirements	Visual inspection
Support Equipment	Battery pack and batteries for blower
Testing Information	Available from Irvin Aerospace Canada Ltd.
Applicable Regulations	Not applicable
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not specified

WORKING DRAFT

General

Name	<i>Kappler CPF 4 Bib Overall</i>
Item # 37	Picture Not Available
Technology	Multi-layer barrier film composite laminated to a high strength 2.3 oz polypropylene substrate
Stock Number	4T459
Protection Type	Percutaneous
Equipment Category	Overalls—adjustable webbing straps and snap lock closures
Availability	In stock
Current User(s)	REC's Customers: EPA; Department of State Consequence Management & Diplomatic Security Division; State of NY; NYC Police; City of Mobile, AL; Department of Justice Center for Domestic Preparedness; FBI; Wisconsin Office of Emergency Management; DOD; Indiana Office of State Fire Marshall; Jefferson County, MO
Manufacturer	Kappler Safety Group 70 Grimes Drive Guntersville, AL 35976 www.kappler.com POC: Kendra Barclay 256-505-4000 (Tel) 256-582-1163 (Fax) email: kbarclay@kappler.com
Manufacturer Type	Domestic
Developer	Kappler Protective Apparel and Fabrics
Source	www.kappler.com
Certification	None

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	None
Biological Warfare (BW) Agents Protected Against	Not applicable
Toxic Industrial (TIMs) Protected Against	Carbon disulfide, sulfuric acid, ammonia, chlorine, hydrogen chloride, and ethylene oxide
Duration of Protection	>480 min
Recommended Use(s)	Kappler recommends that CPF 4 be used in chemical applications where the risk of coming in contact with chemical is high splash

Physical Parameters

Sizes Available	S through 3XL
Weight	9 lb per case, 6 per case
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a 2.3 oz polypropylene substrate

WORKING DRAFT

Construction Type

Strapped seams

Color

Green

Logistical Parameters

Ease of Use

Some instruction required

Consumables

Not applicable

Maintenance Requirements

Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use .

Shelf Life

Under proper storage conditions there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of “aged” and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to “training use only” be considered when they no longer pass the visual inspection and/or pressure test.

Transportability

Not applicable

Operational Limitations

Temperature service range: -85 °F to 200 °F

Environmental Conditions

Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, “Test Methods for Coated Fabrics,” using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136 “Standard Test Method for Coated Fabrics—Low Temperature Bend Test”. This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F and the fabrics showed no signs of damage.

Unit Cost

Contact customer service for pricing

Maintenance Cost

Product is designed for limited use

Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of

WORKING DRAFT

any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in the manual and are responsible for all loss or damage from use or handling which results from conditions beyond the control of the manufacturer.

Don/Doff Information

See instruction manual for instructions on donning and doffing

Use/Reuse

It is completely up to the discretion of the person wearing the suit. Kappler considers CPF 4 a limited use suit and reuse is based on both an evaluation of the physical state of the garment and also the level and type of chemical exposure.

Launderability

See instruction manual for instructions on donning and doffing

Accessories

Additional accessories that may be purchased include pressure test kit, chemtape, kooljacket, Tingley HazMat boot, and decontamination shower

Special Requirements

Training Requirements

Some instruction required

Training Available

Training video available, Suit Smart CD

Manuals Available

Instruction manual available

Surveillance Testing Requirements

Visual Inspections upon receipt from manufacturer, after each use, and before the next use

Support Equipment

Appropriate respiratory equipment

Testing Information

ASTM D751 Test Battery

Applicable Regulations

OSHA 1910.132 and OSHA 1910.120

Health Hazards

Not applicable

Communications Interface Capability

Not applicable

EOD Compatibility

Not applicable

WORKING DRAFT

General

Name	<i>Kappler CPF 4 Hood</i>
Item # 38	Picture Not Available
Technology	Multi-layer barrier film composite laminated to a high strength 2.3 oz polypropylene substrate
Stock Number	4T651
Protection Type	Percutaneous
Equipment Category	Hood in waist length dickie style; PVC face shield, velcro closures on both sides, elastic at shoulders
Availability	In stock
Current User(s)	REC's Customers: EPA; Department of State Consequence Management and Diplomatic Security Division; State of NY; NYC Police; City of Mobile, AL; Department of Justice Center for Domestic Preparedness; FBI; Wisconsin Office of Emergency Management; DOD; and Indiana Office of State Fire Marshall; Jefferson County, MO.
Manufacturer	Kappler Safety Group 70 Grimes Drive Guntersville, AL 35976 www.kappler.com POC: Kendra Barclay 256-505-4000 (Tel) 256-582-1163 (Fax) email: kbarclay@kappler.com
Manufacturer Type	Domestic
Developer	Kappler Protective Apparel and Fabrics
Source	www.kappler.com
Certification	None

Operational Parameters

Chemical Warfare (CW)	None
Agents Protected Against	
Biological Warfare (BW)	Not applicable
Agents Protected Against	
Toxic Industrial (TIMs)	Carbon disulfide, sulfuric acid, ammonia, chlorine, hydrogen chloride, and ethylene oxide
Protected Against	
Duration of Protection	>480 min
Recommended Use(s)	Kappler recommends that CPF 4 be used in chemical applications where the risk of coming in contact with chemical is high splash

Physical Parameters

Sizes Available	S through 3XL
Weight	10 lb, 6 per case
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a 2.3 oz polypropylene substrate

WORKING DRAFT

Construction Type

Strapped seams

Color

Green

Logistical Parameters

Ease of Use

Some instruction required

Consumables

Not applicable

Maintenance Requirements

Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.

Shelf Life

Under proper storage conditions there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of “aged” and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to “training use only” be considered when they no longer pass the visual inspection and/or pressure test.

Transportability

Not applicable

Operational Limitations

Temperature service range: -85 °F to 200 °F

Environmental Conditions

Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, “Test Methods for Coated Fabrics,” using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, “Standard Test Method for Coated Fabrics—Low Temperature Bend Test.” This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F and the fabrics showed no signs of damage.

Unit Cost

Contact customer service for pricing

Maintenance Cost

Product is designed for limited use

Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of

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any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in the manual and are responsible for all loss or damage from use or handling which results from conditions beyond the control of the manufacturer.

Don/Doff Information

See instruction manual for instructions on donning and doffing

Use/Reuse

It is completely up to the discretion of the person wearing the suit. Kappler considers CPF 4 a limited use suit and reuse is based on both an evaluation of the physical state of the garment and also the level and type of chemical exposure.

Launderability

See instruction manual for instructions on donning and doffing

Accessories

Additional accessories that may be purchased include chemtape, kooljacket, Tingley HazMat boot, and decontamination shower

Special Requirements

Training Requirements

Some instruction required

Training Available

Training video available, Suit Smart CD

Manuals Available

Instruction manual available

Surveillance Testing Requirements

Visual Inspections upon receipt from manufacturer, after each use, and before the next use

Support Equipment

Appropriate respiratory equipment

Testing Information

ASTM D751 Test Battery

Applicable Regulations

OSHA 1910.132 and OSHA 1910.120

Health Hazards

Not applicable

Communications Interface Capability

Not applicable

EOD Compatibility

Not applicable

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General

Name	<i>Kappler CPF 4 Jacket</i>
Item # 39	Picture Not Available
Technology	Multi-layer barrier film composite laminated to a high strength 2.3 oz polypropylene substrate
Stock Number	4T670
Protection Type	Percutaneous
Equipment Category	Jacket—zipper front with double storm flap, mandarin collar, elastic wrists
Availability	In stock
Current User(s)	REC's Customers: EPA; Department of State Consequence Management and Diplomatic Security Division; State of NY; NYC Police; City of Mobile, AL; Department of Justice Center for Domestic Preparedness; FBI; Wisconsin Office of Emergency Management; DOD; and Indiana Office of State Fire Marshall; Jefferson County, MO.
Manufacturer	Kappler Safety Group 70 Grimes Drive Guntersville, AL 35976 www.kappler.com POC: Kendra Barclay 256-505-4000 (Tel) 256-582-1163 (Fax) email: kbarclay@kappler.com
Manufacturer Type	Domestic
Developer	Kappler Protective Apparel and Fabrics
Source	www.kappler.com
Certification	None

Operational Parameters

Chemical Warfare (CW)	None
Agents Protected Against Biological Warfare (BW)	Not applicable
Agents Protected Against Toxic Industrial (TIMs)	Carbon disulfide, sulfuric acid, ammonia, chlorine, hydrogen chloride, and ethylene oxide
Protected Against	
Duration of Protection	>480 min
Recommended Use(s)	Kappler recommends that CPF 4 be used in chemical applications where the risk of coming in contact with chemical is high splash

Physical Parameters

Sizes Available	S through 3XL
Weight	10 lb/4.5kg, 6 per case
Package Size and Volume	Not specified
Power Requirements	Not applicable

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Material Type	Multi-layer barrier film laminated to a 2.3 oz polypropylene substrate
Construction Type	Strapped seams
Color	Green
<u>Logistical Parameters</u>	
Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of “aged” and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to “training use only” be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	Temperature service range: -85 °F to 200 °F
Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, “Test Methods for Coated Fabrics,” using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200° and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, “Standard Test Method for Coated Fabrics—Low Temperature Bend Test.” This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60 ° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use

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Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in the manual and are responsible for all loss or damage from use or handling which results from conditions beyond the control of the manufacturer.

Don/Doff Information

See attached instruction manual for instructions on donning and doffing

Use/Reuse

It is completely up to the discretion of the person wearing the suit. Kappler considers CPF 4 a limited use suit and reuse is based on both an evaluation of the physical state of the garment and also the level and type of chemical exposure.

Launderability

See attached instruction manual for instructions on donning and doffing

Accessories

Additional accessories that may be purchased include pressure test kit, chemtape, kooljacket, Tingley HazMat boot, and decontamination shower

Special Requirements

Training Requirements

Some instruction required

Training Available

Training video available, Suit Smart CD

Manuals Available

Instruction manual available

Surveillance Testing Requirements

Visual Inspections upon receipt from manufacturer, after each use, and before the next use

Support Equipment

Appropriate respiratory equipment

Testing Information

ASTM D751 Test Battery

Applicable Regulations

OSHA 1910.132 and OSHA 1910.120

Health Hazards

Not applicable

Communications Interface Capability

Not applicable

EOD Compatibility

Not applicable

WORKING DRAFT

General

Name

Lakeland Tychem® 10000 Level B Jacket

Item # 40



Technology

Selectively permeable

Stock Number

10260

Protection Type

Percutaneous

Equipment Category

Jacket, (hood with drawstring, zipper front, double storm flap with velcro, and elastic wrists)

Availability

4 wk to 5 wk ARO

Current User(s)

Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, and industry

Manufacturer

Lakeland Industries, Inc.
202 Pride Lane, SW
Decatur, AL 35602
POC: Carl Brown (Technical Product Specialist)
POC: Steve McCully (Product Manager)
800-645-9291 (Tel)
256-350-3011 (Fax)
Internet: www.lakeland.com
Domestic

Manufacturer Type

Developer

Lakeland Industries

Source

www.lakeland.com

Certification

Not applicable

Operational Parameters

**Chemical Warfare (CW)
Agents Protected Against**

Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

**Biological Warfare (BW)
Agents Protected Against**

Protects against all biological toxins and pathogens

**Toxic Industrial (TIMs)
Protected Against**

Excellent protection against a wide variety of TIMs

Duration of Protection

Minimum of 8 h

Recommended Use(s)

Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available

S through 5X

Weight

12 pounds per case, 6 in a case

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Package Size and Volume	Not specified
Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Seam sewn and the heat-sealed with tape
Color	Lime-green

Logistical Parameters

Ease of Use	Garment poses no major mobility of flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Operational temperature range of Tychem 10000 material is -25 °F to 225 °F
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/Doff Information	Not specified
Use/Reuse	Limited use
Laundryability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	Not specified
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes

WORKING DRAFT

General

Name

Lakeland Tychem® 10000 Level B Overalls

Item # 41



Technology

Selectively permeable

Stock Number

10320

Protection Type

Percutaneous

Equipment Category

Overalls, bib pants with adjustable suspenders, and hemmed cuffs

Availability

4 wk to 5 wk ARO

Current User(s)

Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, and industry

Manufacturer

Lakeland Industries, Inc.
202 Pride Lane, SW
Decatur, AL 35602
POC: Carl Brown (Technical Product Specialist)
POC: Steve McCully (Product Manager)
800-645-9291 (Tel)
256-350-3011 (Fax)
Internet: www.lakeland.com
Domestic

Manufacturer Type

Developer

Lakeland Industries

Source

www.lakeland.com

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Agents Protected Against

Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

Biological Warfare (BW)

Agents Protected Against

Protects against all biological toxins and pathogens

Toxic Industrial (TIMs)

Protected Against

Excellent protection against a wide variety of TIMs

Duration of Protection

Minimum of 8 h

Recommended Use(s)

Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available

Small through 5X

Weight

12 lb per case, 6 in a case

Package Size and Volume

Not specified

WORKING DRAFT

Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Seam sewn and the heat-sealed with tape
Color	Lime-green

Logistical Parameters

Ease of Use	Garment poses no major mobility of flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Operational temperature range of Tychem 10000 material is -25 °F to 225 °F
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/Doff Information	Not specified
Use/Reuse	Limited use
Launderability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	Not specified
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes

WORKING DRAFT

General

Name

Lakeland Tychem® 10000 Level B Hood

Item # 42



Technology

Selectively permeable

Stock Number

10716

Protection Type

Percutaneous

Equipment Category

Hood, bib style, 20 mil PVC faceshield, and velcro straps

Availability

4 wk to 5 wk ARO

Current User(s)

Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, and industry

Manufacturer

Lakeland Industries, Inc.
202 Pride Lane, SW
Decatur, AL 35602
POC: Carl Brown (Technical Product Specialist)
POC: Steve McCully (Product Manager)
800-645-9291 (Tel)
256-350-3011 (Fax)
Internet: www.lakeland.com
Domestic

Manufacturer Type

Developer

Lakeland Industries

Source

www.lakeland.com

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Agents Protected Against

Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.

Biological Warfare (BW)

Agents Protected Against

Protects against all biological toxins and pathogens

Toxic Industrial (TIMs)

Protected Against

Excellent protection against a wide variety of TIMs

Duration of Protection

Minimum of 8 h

Recommended Use(s)

Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available

S through 5X

Weight

12 lb per case, 6 in a case

WORKING DRAFT

Package Size and Volume	Not specified
Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Seam sewn and the heat-sealed with tape
Color	Lime-green

Logistical Parameters

Ease of Use	Garment poses no major mobility of flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Operational temperature range of Tychem 10000 material is -25 °F to 225 °F
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/Doff Information	Not specified
Use/Reuse	Limited use
Laundryability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	Not specified
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes

WORKING DRAFT

General

Name	<i>Lakeland Tychem® 10000 Level B Apron</i>
Item # 43	Picture Not Available
Technology	Selectively permeable
Stock Number	10730
Protection Type	Percutaneous
Equipment Category	Apron, long sleeves, elastic wrists, velcro straps at neck, and tie in back
Availability	4 wk to 5 wk ARO
Current User(s)	Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, and industry
Manufacturer	Lakeland Industries, Inc. 202 Pride Lane, SW Decatur, AL 35602 POC: Carl Brown (Technical Product Specialist) POC: Steve McCully (Product Manager) 800-645-9291 (Tel) 256-350-3011 (Fax) Internet: www.lakeland.com
Manufacturer Type	Domestic
Developer	Lakeland Industries
Source	www.lakeland.com
Certification	Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800-558-9329 and request Document 595.
Biological Warfare (BW) Agents Protected Against	Protects against all biological toxins and pathogens
Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs
Duration of Protection	Minimum of 8 h
Recommended Use(s)	Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available	S through 5X
Weight	12 lb per case, 12 in a case
Package Size and Volume	Not specified
Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Seam sewn and the heat-sealed with tape
Color	Lime-green

WORKING DRAFT

Logistical Parameters

Ease of Use	Garment poses no major mobility or flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Operational temperature range of Tychem 10000 material is -25 °F to 225 °F
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/Doff Information	Not specified
Use/Reuse	Limited use
Launderability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	Not specified
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes

WORKING DRAFT

General

Name

Lakeland Tyvek® QC Level B Jacket

Item # 44



Technology

Selectively permeable

Stock Number

70250

Protection Type

Percutaneous

Equipment Category

Jacket, collar, double storm flap with velcro, zipper, and elastic wrists

Availability

4 wk to 5 wk ARO

Current User(s)

Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, industry

Manufacturer

Lakeland Industries, Inc.
202 Pride Lane, SW
Decatur, AL 35602
POC: Carl Brown (Technical Product Specialist)
POC: Steve McCully (Product Manager)
800-645-9291 (Tel)
256-350-3011 (Fax)
Internet: www.lakeland.com
Domestic

Manufacturer Type

Developer

Lakeland Industries

Source

www.lakeland.com

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Not tested

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Many inorganic acids, bases, and other liquid chemicals such as pesticides. Questions call Lakeland Customer Service at 800-645-9291.

Protected Against

Duration of Protection

For specific TIMs data, contact Lakeland Customer Service at 800-645-9291

Recommended Use(s)

Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available

S to 5X

Weight

6 lb per case, 6 in a case

Package Size and Volume

Not specified

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Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Sealed seam
Color	Yellow or grey

Logistical Parameters

Ease of Use	Garment poses no major mobility of flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Designed to be worn in common outdoor conditions
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/DoFF Information	Not specified
Use/Reuse	Limited use
Launderability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	None
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes

WORKING DRAFT

General

Name

Lakeland Tyvek® QC Level B Pants

Item # 45



Technology

Selectively permeable

Stock Number

70300

Protection Type

Percutaneous

Equipment Category

Pants, elastic waist, and hemmed cuffs

Availability

4 wk to 5 wk ARO

Current User(s)

Government organizations, municipal HazMat teams, fire departments, international HazMat/military organizations, and industry

Manufacturer

Lakeland Industries, Inc.
202 Pride Lane, SW
Decatur, AL 35602
POC: Carl Brown (Technical Product Specialist)
POC: Steve McCully (Product Manager)
800-645-9291 (Tel)
256-350-3011 (Fax)
Internet: www.lakeland.com
Domestic

Manufacturer Type

Developer

Lakeland Industries

Source

www.lakeland.com

Certification

Not applicable

Operational Parameters

Chemical Warfare (CW)

Not tested

Agents Protected Against

Biological Warfare (BW)

Not specified

Agents Protected Against

Toxic Industrial (TIMs)

Many inorganic acids, bases, and other liquid chemicals such as pesticides. Questions call Lakeland Customer Service at 800-645-9291.

Protected Against

Duration of Protection

For specific TIMs data, contact Lakeland Customer Service at 800-645-9291

Recommended Use(s)

Tactical operations, HazMat teams, chemical/biological testing, training, and warfare environments

Physical Parameters

Sizes Available

S to 5X

Weight

6 lb per case, 6 in a case

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Package Size and Volume	Not specified
Power Requirements	None
Material Type	Garment is selectively permeable
Construction Type	Sealed seam
Color	Yellow or grey

Logistical Parameters

Ease of Use	Garment poses no major mobility of flexibility problems from wearer compared to other Level B CPC
Consumables	None
Maintenance Requirements	Not specified
Shelf Life	After 5 yr, recommended to use only for training
Transportability	No support equipment required for transportation
Operational Limitations	Off the shelf cooling systems are available. Operational limitations to be decided by safety manager.
Environmental Conditions	Designed to be worn in common outdoor conditions
Unit Cost	Cost to be determined by distributors
Maintenance Cost	Not applicable
Warranty	90 d
Don/DoFF Information	Not specified
Use/Reuse	Limited use
Launderability	Suits are not launderable
Accessories	None

Special Requirements

Training Requirements	None
Training Available	Available through regional sales representation
Manuals Available	User Manual and Permeation Guide available
Surveillance Testing Requirements	Visually inspect prior to use for holes or tears
Support Equipment	None
Testing Information	Not specified
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Option is available
EOD Compatibility	Yes